



SPAWAR  
Systems Center  
San Diego



# ACMS

## Automated Communications Management System

SSC San Diego  
San Diego, CA 92152-5001

## Automated Communications Management System

The Automated Communications Management System (ACMS) is a major element of the Milstar Mission Control Segment. ACMS provides all of the capabilities required to satisfy the complex Milstar planning process.



These capabilities are implemented in a state-of-the-art product that incorporates the Milstar knowledge base in its planning algorithms and rules. The operator is presented with a sequence of graphical screens that lead the user through the Milstar planning tasks:

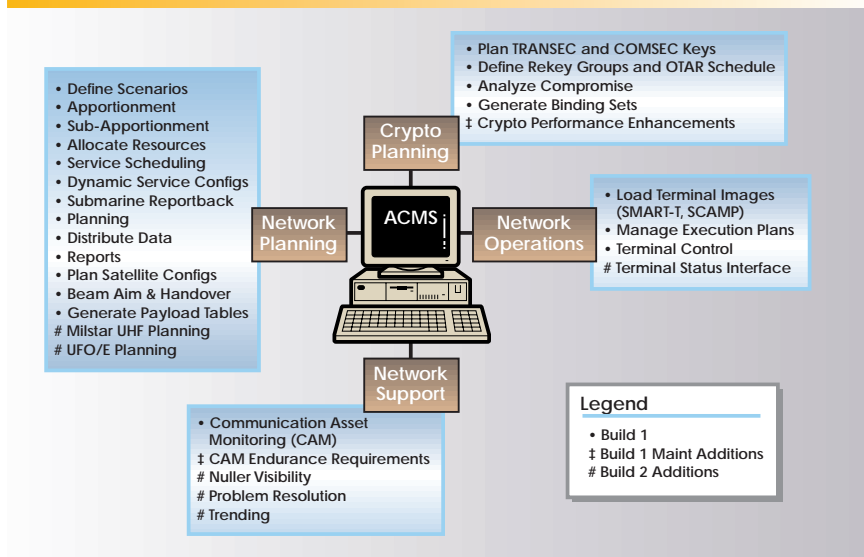
- Milstar Data Management
- Satellite and Constellation Configuration Planning
- Operational Scenario Planning
- Milstar Resource Apportionment
- Crypto Key Planning
- Army, Navy, and Air Force EHF Terminal Data Generation
- Army Terminal Control
- Satellite Resource Utilization
- Monitoring and Analysis



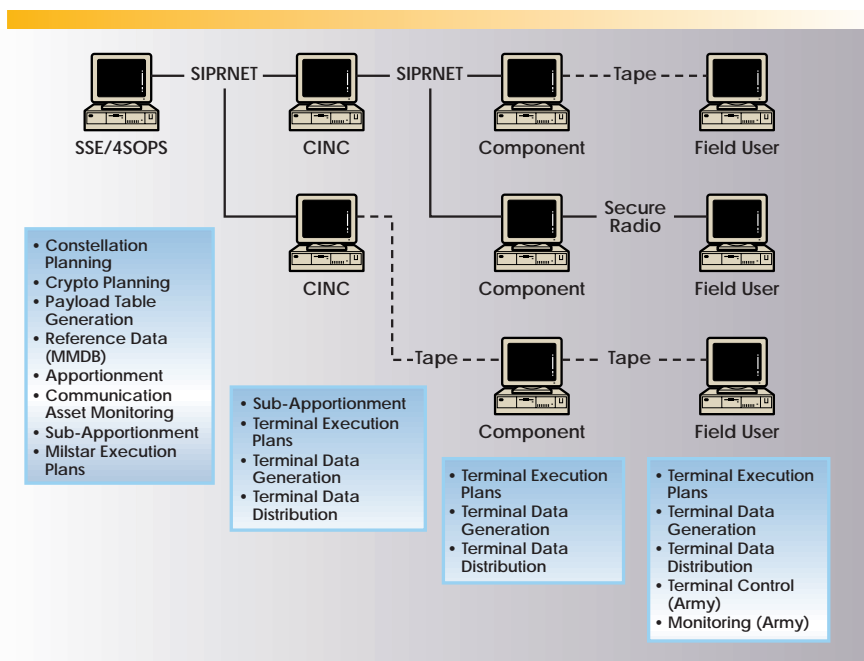
# ACMS

## Includes All Capabilities Required for Joint Service Milstar Planning

ACMS contains an intelligent optimizing loader that evaluates satellite resource assignments to save the most limited resources. The loader provides full time-phased planning that models satellite and terminal motion and dynamic service configuration changes with time, plans for satellite and beam handover, and provides antenna pointing schedules.



ACMS provides a networked, multi-user, planning environment that services all Milstar user echelons from the Joint Staff down to the field units.



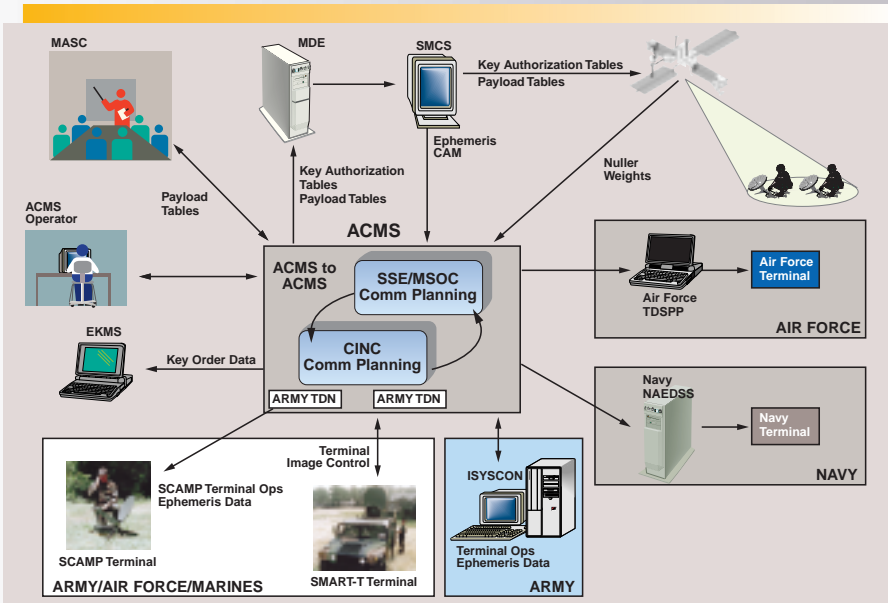


# ACMS

## Includes All Capabilities Required for Joint Service Milstar Planning

ACMS interfaces with the Navy EHF SATCOM Program (NESP) terminal via the Navy Adaptation Ephemeris Data Support System (NAEDSS) Terminal Data Node and with the Air Force Command Post Terminal via the Time Distribution Subsystem Preprocessor (TDSP) Terminal Data Node. ACMS is the Terminal Data Node for the Army's SCAMP and SMART-T terminals, generating and distributing the required planning database to the terminals. It also provides terminal control for SMART-T.

ACMS creates and distributes key authorization and payload tables to the Satellite Mission Control System (SMCS) via the Milstar Development Element (MDE) and transmits and receives payload tables to the Milstar Auxiliary Support Center (MASC).



## Provides Capabilities Tailored to the Service Users

### General Capabilities

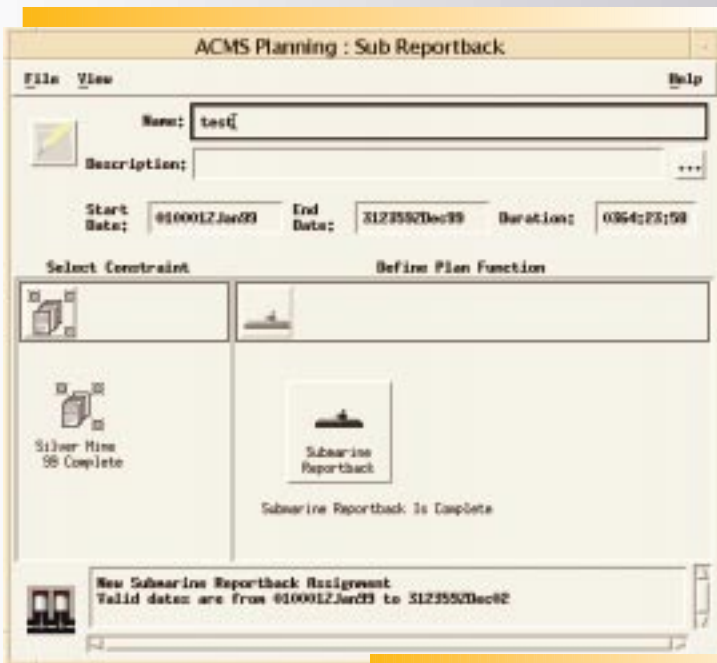
- Static and Dynamic Planning
- Satellite Configuration Planning
- Planning Scenario Definition
- Apportionment/Sub-Apportionment Planning
- Resource Allocation
- Payload Table Generation and Distribution
- Agile Beam Management
- "What if" Planning
- Crypto Planning
- ACMS-to-ACMS Data Distribution
- Reports
- Communication Asset Monitor/Analysis
- Nuller Visibility
- Problem Resolution
- DII COE Compliant
- Multi-User Support
- Milstar Master Database Functionality



# Provides Capabilities Tailored to the Service Users

## Navy Capabilities

- Navy Terminal Image Data Interface
- B1 Trusted Guard for Security
- Submarine Reportback Assignment and Network Planning
- Bundled Service Planning
- Planning Constraints Specific to the NESF Terminals (Submarine, Shore, Ship)
- Spot Beam Pointing Schedule
- Beam and Satellite Handover Planning
- Terminal Execution Plan (Comm Plan)
- Modeling of Multiple Terminals Per Mobile (Ship) Platform
- Modeling of PIMs and AOOs
- Navy EHF Communications Controller Planning





# Tactical Planning Provides Automated Features for Quick and Simple Operation

## Army Support

- Automated Tactical Planning
- SMART-T Terminal Control
- Payload Resource Monitoring via SMART-T
- Antenna Pointing Control
- Rehoming and Devolution
- SMART-T/SCAMP Terminal Image Generation and Distribution
- ISYSCON Interface
- Nuller Visibility

## SCHEDULE

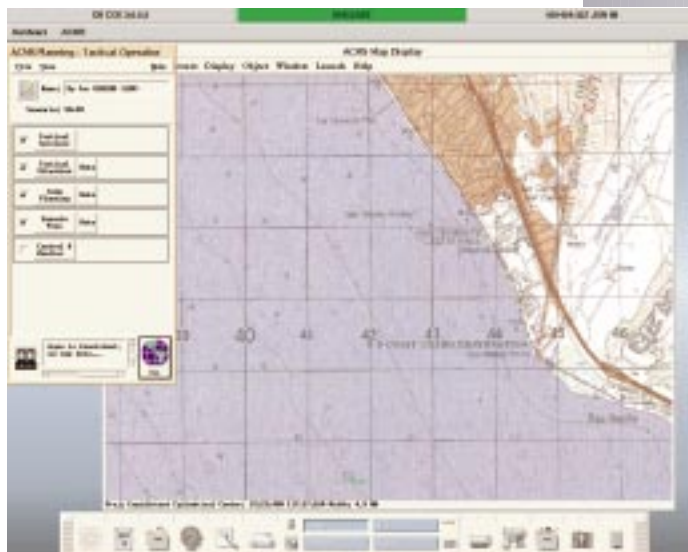
**ACMS Build 1** is currently in user evaluation at Air Force Space Command, Colorado Springs, Colorado. It is also being used to support Milstar factory testing. ACMS Build 1 will be released for operational use in the year 2000.

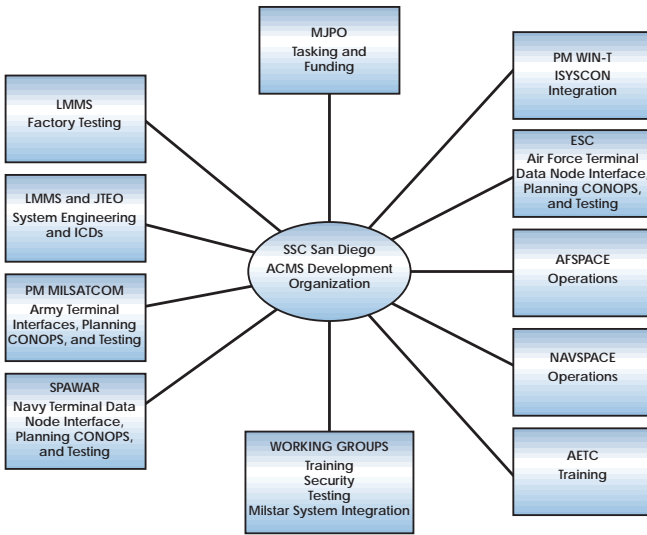
**Build 1 Maintenance** will provide updates to

Crypto Planning, additional Dynamic Service Loader capability, enhancements to Communications Asset Monitoring, addition of Global Data Management services, and added Data Distribution Security features. ACMS Build 1 Maintenance is scheduled for completion in June 2000.

**ACMS Build 2** will incorporate Milstar EHF enhance-

ments, Milstar UHF Planning, UFO/E Planning, the interface to Dual Modem Upgrade-2 Terminal, the interface for Milstar UHF images for Air Force Command Post, and the tracking of Terminal Outage Reports. ACMS Build 2 will be completed in 2003.





For further information, contact:

**MILSATCOM Joint Program Office  
(SMC/MCMC)**

**SSC San Diego (D835)**

Reviewed and approved by

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